#### **REMARKS**

The Office Action dated January 3, 2008, and the patents cited therein have been carefully reviewed, and in view of the above changes and following remarks reconsideration and allowance of all the claims pending in the application are respectfully requested.

Claims 1-5, 7, 8, 11-16, 23-25 and 27-31 stand rejected. Claims 9, 10 and 17-22 stand withdrawn from consideration. By this Amendment, claims 1 and 23 have been amended, and claims 2, 4, 24, 25, 30 and 31 have been canceled. Claims 1, 3, 5, 7, 8, 11-16, 23 and 27-29 remain pending.

#### The Amendment of the Claims

Applicants have amended claims 1 and 23 respectively include features of claims 4 and 25, and claims 4 and 25 have been accordingly canceled. Claims 2, 24, 30 and 31 have been canceled for consistency with amended claims 1 and 23.

Additionally, Applicants have amended claims 1 and 23 so that the claimed acceleration voltage has a range of between 10 keV and 100 keV. Support for this amendment can be found throughout the specification and, for example, at least in originally filed claims 6 and 26.

### The Rejection Under 35 U.S.C. § 112, First Paragraph

Claims 30 and 31 stand rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement.

Applicant respectfully submits that in view of the cancellation of claims 30 and 31, this rejection is now moot.

Consequently, Applicants respectfully request that the Examiner withdraw this amendment.

## The Rejection Under 35 U.S.C. § 102(e) Over Klemmer

Claims 1-3, 7, 8, 14-16, 23, 24 and 27-31 stand rejected under 35 U.S.C. § 102(e) as anticipated by Klemmer et al. (Klemmer), U.S. Patent No. 6,849,349.

Applicants have amended claims 1 and 23 to respectively include features from claims 4 and 25. Additionally, claims 2, 24, 30 and 31 have been canceled for consistency with amended claims 1 and 23.

In view of the amendment of claims 1 and 23, Applicant respectfully submits that the following remarks will be directed to a rejection of claims 1 and 23 as unpatentable over Klemmer in view of Takigawa et al. (Takigawa) because claims 4 and 25 were rejected on this basis.

Applicants respectfully traverse a rejection of claims 1, 3, 7, 8, 14-16, 23 and 27-29 as unpatentable over Klemmer in view of Takigawa. Applicants respectfully submit that the subject matter of any of claims 1, 3, 7, 8, 14-16, 23 and 27-29 is patentable over Klemmer in view of Takigawa. In particular, the method resulting from the combination of Klemmer in view of Takigawa is not the claimed subject matter.

Regarding amended claim 1, neither Klemmer nor Takigawa disclose a method comprising irradiating the magnetic medium with ions having an acceleration voltage of between 10 keV and 100 keV to induce exchange coupling between grains of the magnetic medium, such that the ions are selected from the group consisting of Hg<sup>+</sup>, and In<sup>+</sup>. The Examiner admits that Klemmer is silent in this regard. (See Office Action dated January 3, 2008, page 6, lines 3-4.) Further, the Examiner has not indicated that Takigawa discloses this feature of amended claim 1 because, in fact, Takigawa is also silent regarding this feature of amended claim 1.

Thus, claim 1 is allowable over Klemmer in view of Takigawa. It follows that claims 3, 7, 8, and 14-16, which incorporate the features of amended claim 1, are each allowable over Klemmer in view of Takigawa for at least the same reasons that amended claim 1 is considered allowable over Klemmer in view of Takigawa.

Regarding amended claim 23, Applicants respectfully submit that amended claim 23 is allowable over Klemmer in view of Takigawa for at least the same reasons that amended claim 1 is considered allowable over Klemmer in view of Takigawa. It follows that claims 27-29, which incorporate the features of amended claim 23, are each allowable over Klemmer in view of

Takigawa for at least the same reasons that amended claim 23 is considered allowable over Klemmer in view of Takigawa.

Consequently, Applicants respectfully request that the Examiner withdraw this rejection and allow claims 1, 3, 7, 8, 14-16, 23 and 27-29.

## The Rejection Under 35 U.S.C. §103(a) Over Ravelosona-Ramasitera

Claims 1-3, 7, 8, 11, 14-16, 23-25 and 27-29 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Ravelosona-Ramasitera et al. (Ravelosona-Ramasitera), U.S. Patent No. 6,605,321.

Applicants respectfully traverse this rejection. Applicants respectfully submit that the subject matter according to any of claims 1, 3, 7, 8, 11, 14-16, 23 and 27-29 is patentable over Ravelosona-Ramasitera. Applicant respectfully submits that by withdrawing the rejection of claims 4 and 25 in view of Ravelosona-Ramasitera (see Office Action dated January 3, 2008, page 9, lines 16-18), amended claims 1 and 23 are now allowable over Ravelosona-Ramasitera. It follows that claims 3, 7, 8, 14-16, which incorporate the features of amended claim 1, and claims 27-29, which incorporate the features of amended claim 23, are each allowable over Ravelosona-Ramasitera for at least the same reasons that amended claims 1 and 23 are considered allowable over Ravelosona-Ramasitera.

Consequently, Applicants respectfully request that the Examiner withdraw this rejection and allow claims 1, 3, 7, 8, 11, 14-16, 23 and 27-29.

### The Rejection Under 35 U.S.C. § 103(a) Over Klemmer In View Of Takigawa

Claims 4, 5 and 25 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Klemmer in view of Takigawa et al. (Takigawa), U.S. Patent No. 4,481,042.

Applicants respectfully submit that the cancellation of claim 4 and the amendment of claims 1 and 23 to respectively include features from claims 4 and 25 render this rejection moot.

Consequently, Applicants respectfully request that the Examiner withdraw this rejection.

# The Rejection Under 35 U.S.C. § 103(a) Over Ravelosona-Ramasitera In View Of Baglin

Claims 12 and 13 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Ravelosona-Ramasitera in view of Baglin et al. (Baglin), U.S. Patent No. 6,331,364.

Applicants respectfully traverse this rejection. Applicants respectfully submit that the subject matter according to claims 12 and 13 is patentable over Ravelosona-Ramasitera in view of Baglin. In particular, Applicants respectfully submit that Baglin does not cure the deficiencies of Ravelosona-Ramasitera with respect to amended claim 1, the base claim of both claims 12 and 13.

Consequently, Applicants respectfully request that the Examiner withdraw this rejection and allow claims 12 and 13.

## The Rejection Under 35 U.S.C. § 103(a) Over Klemmer in view of Baglin

Claims 11-13 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Klemmer in view of Baglin.

Applicants respectfully traverse this rejection. Applicants respectfully submit that the subject matter according to claims 11-13 is patentable over Klemmer in view of Baglin. In particular, Applicants respectfully submit that Baglin does not cure the deficiencies of Klemmer with respect to amended claim 1, the base claim of claims 11-13.

Consequently, Applicants respectfully request that the Examiner withdraw this rejection and allow claims 11-13.

Applicants respectfully note that additional patentable distinctions between Klemmer, Ravelosona-Ramasitera, Baglin and Takigawa and the rejected claims exist; however, the foregoing is believed sufficient to address the Examiner's rejections. Additionally, failure of the Applicants to respond to a position taken by the Examiner is not an indication of acceptance or acquiescence of the Examiner's position. Instead, it is believed that the Examiner's positions are

rendered moot by the foregoing and, therefore, it is believed not necessary to respond to every position taken by the Examiner with which Applicants do not agree.

#### **CONCLUSION**

In view of the above amendments and arguments which present the claims in better form for consideration on appeal, it is urged that the present application is now in condition for allowance. Should the Examiner find that a telephonic or personal interview would expedite passage to issue of the present application, the Examiner is encouraged to contact the undersigned attorney at the telephone number indicated below.

It is requested that this application be passed to issue with claims 1-5, 7-25 and 27-29.

Respectfully submitted,

Date: April 3, 2008

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